

the new blue





**Something rather unexpected
has happened at IBM.**

Our people have worked hard in recent years to reinvent not just the mechanics of their work, but the soul of their company. To be obsessed with customers. First to market. A revitalized engine of innovation, growth and profitability.

They thought they were transforming an enterprise. It turns out their work is part of something much bigger. Information technology is changing every aspect of life. How we work, learn, and govern ourselves. How we think about communication and culture. How we *think*.

IBM is at the center of this global revolution. It's fueling our growth and inspiring our people in ways not seen in a generation. It's happening all over the world, all over IBM. Look inside. **It starts here.**





Dear fellow investor,

LAST YEAR I TOLD YOU THAT OUR STRATEGIC VISION WAS BEGINNING TO TAKE HOLD, IN THE MARKETPLACE AND INSIDE IBM. I SAID WE PLANNED TO STAY THE COURSE – AND TO INTENSIFY OUR EXECUTION.

My message this year is unchanged. We will continue to implement a strategic plan that our customers, business partners, investors and employees understand and endorse. We expect to continue delivering consistent revenue growth – as we now have for 14 straight quarters. We will continue to improve the execution of our strategies to produce marketplace wins, chiefly by strengthening and leveraging IBM's unique breadth of people, skills and technology – assets many of our competitors are trying furiously to replicate.

IBM's market valuation – the ultimate measure of our performance – grew by \$23 billion in 1997. Our stock price surpassed its all-time high and continued to climb, rising 38 percent over the year. Since our major restructuring in 1993, our marketplace worth has increased by more than \$73 billion. Last year we split the stock for the first time since 1979.

If you don't read any further in this annual report, know that IBM's comeback is on track and doesn't require a major course correction.

But I hope you will read on. A 40,000-foot view doesn't really tell the story – where growth will come from and why, and how we plan to return IBM to industry leadership.

WHAT DID 1997 TELL US?

FIRST, it demonstrated that IBM remains on solid financial ground. For the third straight year, we reported record revenue – \$78.5 billion, up 3 percent. That’s 8 percent after you adjust for the effects of currency shifts.

Our earnings rose to \$6.1 billion from \$5.9 billion in 1996 (excluding a charge related to acquisitions in the first quarter of 1996). Our earnings per common share increased about 12 percent, to a record \$6.18, from \$5.53 in 1996.

We remain committed to maximizing shareholder value, and to making productive use of our cash. We increased our investment in the exploration and development of future technologies, investing \$5.5 billion in 1997 on research and development, up \$300 million from 1996. We invested nearly \$7 billion during the year on capital expenditures to strengthen existing businesses. We announced plans to invest \$700 million to build one of the world’s most advanced semiconductor development facilities. We invested \$663 million last year in the ongoing reengineering of IBM, resulting in greater manufacturing efficiencies, better customer service and reduced cycle time. We invested \$700 million to acquire leadership companies like Unison Software, which strengthens our systems management business, a majority stake in NetObjects, a leader in website design software, and total ownership of Advantis, the U.S. data network services unit of the IBM Global Network.

After all these investments, we still had substantial cash on hand to return to shareholders – directly, via dividends, and indirectly, via our ongoing stock buyback program (another \$7.1 billion of IBM shares

in 1997). Notwithstanding these investments in the company and shareholder return, IBM finished the year with \$7.6 billion in cash.

SECOND, 1997 revealed that there are powerful growth engines underlying our overall numbers. This was evident across most of our major businesses:

- Services revenue increased to \$19.3 billion, up 28 percent in constant currency, continuing an exceptionally strong growth story. Seven years ago, with revenues of about \$4 billion, we were barely visible in the marketplace. Today, we are the market leader, and IBM Global Services has the highest customer satisfaction rating in the industry. The total value of our services business already booked for 1998 and years to come is more than \$42 billion, and we are growing faster than the industry. We continue to hire aggressively to fuel our growth – 15,000 people joined our services business in 1997.
- Software revenue grew 4 percent in constant currency, and its gross profit margin grew by 2 points. These are modest gains, but the key fact to note here is that in distributed middleware – the fastest-growing part of the software industry – we are growing faster than the industry. Five years ago, only one out of ten dollars in IBM software revenue was from distributed software; today, it’s nearly four of ten. Lotus Notes “seats” doubled for the third straight year, to 20 million. And Tivoli’s systems management products are growing twice as fast as those of the industry. We are also making a strong run at first place in databases, helped by the success of our new DB2 Universal Database.

financial highlights

International Business Machines Corporation
and Subsidiary Companies

(Dollars in millions except per share amounts)

1997

1996

For the year:		
Revenue	\$ 78,508	\$ 75,947
Earnings before income taxes	\$ 9,027	\$ 8,587
Income taxes	\$ 2,934	\$ 3,158
Net earnings	\$ 6,093	\$ 5,429
Per share of common stock	\$ 6.18	\$ 5.12 *
Per share of common stock - assuming dilution	\$ 6.01	\$ 5.01 *
Cash dividends paid on common stock	\$ 763	\$ 686
Per share of common stock	\$.775 *	\$.65 *
Investment in plant, rental machines and other property	\$ 6,793	\$ 5,883
Average number of common shares outstanding (in millions)	983	1,057
At end of year:		
Total assets	\$ 81,499	\$ 81,132
Net investment in plant, rental machines and other property	\$ 18,347	\$ 17,407
Working capital	\$ 6,911	\$ 6,695
Total debt	\$ 26,926	\$ 22,829
Stockholders' equity	\$ 19,816	\$ 21,628
Number of employees in IBM/wholly owned subsidiaries	269,465	240,615
Number of common stock holders	623,537	622,594
* Adjusted to reflect a two-for-one split of the common stock effective May 9, 1997		

- Hardware grew 4 percent in constant currency. Again, a closer look reveals important trends. In 1997 we thoroughly reinvigorated our entire server line. Our new System/390 G4 enterprise servers represent the complete conversion of our mainframes to microprocessor technology. Overall, the System/390 line delivered 30 percent growth in shipments of processing capacity. We introduced Web-enabled RS/6000s and AS/400 servers. Our new Netfinity PC server line, which brings our high-end server expertise to bear on smaller-scale needs, has been eagerly accepted by the market. Of particular note is our storage business. Despite having invented magnetic disk storage four decades ago and having pioneered every significant development since then, IBM had fallen seriously behind the competition. Today, our storage business is winning again. Last year,

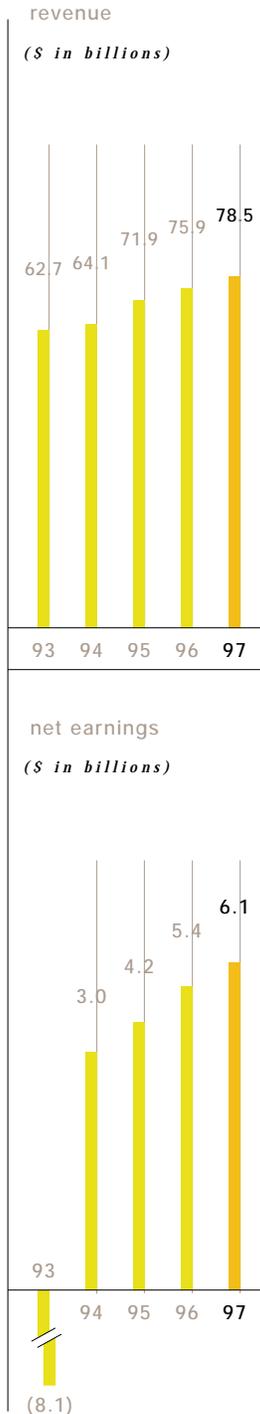
it gained further momentum by introducing a string of leadership products and by growing revenue from hard-disk drives twice as fast as the industry.

- Our success in disk drives highlights another important story: the growth in sales of IBM technology and components to other companies, many of them our competitors. Five years ago, our OEM revenue was only about \$1 billion. In 1997 it was \$5.6 billion, growing at double-digit rates, driven mainly by OEM sales of disk drives and semiconductors. We're also generating more than \$1 billion annually by licensing IBM patents and other intellectual property to technology companies.
- IBM's commercial PC operations enjoyed a solid year, helping our PC business maintain its

market share and grow revenues by 7 percent in constant currency. We remained the biggest seller of “thin client” network computers. More than 3,000 enterprise customers purchased tens of thousands of IBM Network Stations last year. The award-winning IBM ThinkPad continued as the leader in mobile systems. And we introduced a new line of Microsoft Windows NT-based workstations in 1997, the IBM IntelliStation.

- We continued to expand rapidly in the world’s emerging markets – though, like many other global companies, we are being affected by the financial turmoil in parts of Asia. We announced plans to expand our global network of research laboratories by establishing a new one – our eighth – in India. In Hungary we pioneered a “utility” service for small- and medium-size businesses – selling computing power and applications via networks in the same way water and electricity are sold. We plan to roll it out in other markets around the world.

THIRD, we were reminded of the extraordinary resource we have in IBM scientists and technologists – a community of expertise and inventiveness no one can match. For the fifth



straight year, IBM led all companies in U.S. patents – discoveries that are building a foundation that will support the company well into the future. IBM people are delivering major technological breakthroughs and getting them to market faster than ever before. In 1997 alone:

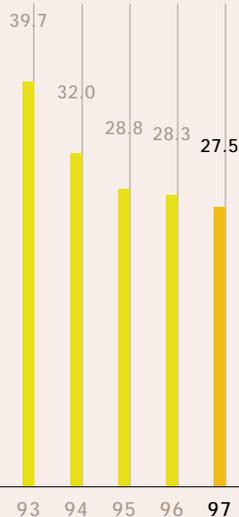
- Deep Blue – a specially programmed RS/6000 SP supercomputer – redefined the way humanity understands its relationship to both machines and thinking itself. It also showed the world an IBM energized by tackling “grand” challenges – beginning with taking on the greatest grandmaster in chess history, and now moving on to pharmaceuticals, financial modeling and weather forecasting.
- Our ViaVoice Gold continuous speech recognition product brought an exciting technology to a new level of user-friendliness. It also potentially opened the world of e-mail and the Internet to a quarter of the planet, through Mandarin ViaVoice.
- Lotus’s eSuite, introduced last fall, is an entirely new approach in personal productivity applications that takes advantage of network-based computing. Written entirely in Java, eSuite applications, such as word

processor and spreadsheet, flow to users' PCs or network computers over both private networks and public networks like the Internet.

- IBM's breakthrough in copper microchips promises a significant increase in the capacity and speed of semiconductors, as well as reductions in cost. IBM has more than 50 issued and pending patents relating to the use of copper in chips, and the first devices will appear this year.
- We quadrupled the capacity of hard-disk drives through IBM's patented giant magnetoresistive (GMR) head technology, and pushed the outer limit of future devices by achieving a new world record in storage density – packing more than 10 billion bits (10 gigabits) per square inch of disk surface.

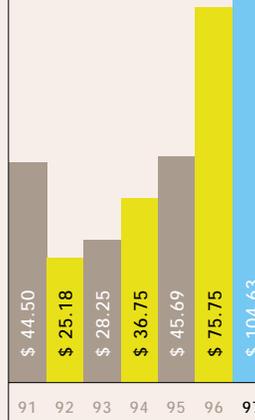
FOURTH, we can always do better. Our consumer PC business underperformed the market in 1997. And we need to do a better job of strengthening and positioning our family of servers, with particular attention to our AS/400 and RS/6000 lines. We are tackling these problems aggressively. We reorganized our consumer PC business, introduced new Aptiva offerings in the sub-\$1,000 category (products that have been

total expenses as a percentage of revenue
(after adjustments)



stock performance
1991-97

Year-end closing prices adjusted to reflect a two-for-one split of the common stock effective May 9, 1997



selling well), and consolidated AS/400 and RS/6000 manufacturing, marketing and development to reduce cost and improve market effectiveness.

FIFTH, 1997 reminded us that there will always be factors beyond our control, macroeconomic factors that affect our near-term performance. We saw this in the striking negative impact of world currencies and weakness in some Asian markets. These conditions continued into the first quarter of 1998, but at this writing we believe they are short-term effects.

THE FINAL LESSON OF 1997 is how much of our destiny we *do* control. Because we are on the right strategic path, and because the broad changes that are transforming the global economy play to IBM's strengths, things are increasingly going our way.

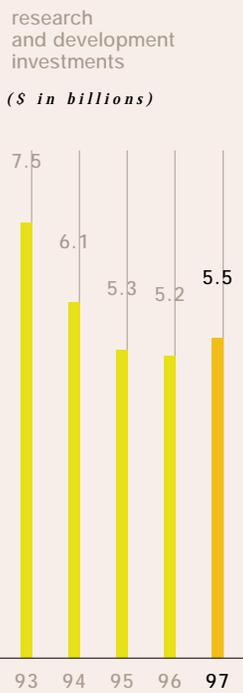
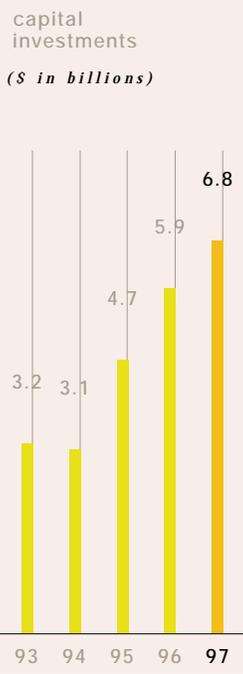
It wasn't always like that. Just five years ago, IBM was on the verge of scattering its businesses to the four corners of the information technology world, to live – or die – within their own industry sectors. We know now what a mistake that would have been.

Our unique value proposition to customers has been – and will continue to be – precisely our ability to offer integrated solutions that draw on resources and strengths across IBM. Today, with the shift to a networked

world, our customers again need integrators. They need secure, reliable, scalable technology – in other words, IBM-style enterprise computing. And they need partners who understand how to apply technology to address basic business issues – our heritage. I believe IBM's comeback is a direct result of our decision to swim against the tide, to stay together.

I think that became clear in 1997 – not just to us, but to the marketplace at large. Last year, *the idea of IBM* began to take hold. Our vision of a networked world began to be accepted, not as a corporate slogan, but as an insightful view of how the world was really changing. Wall Street, customers, business partners and industry consultants welcomed our e-business campaign, which laid out a compelling vision for our customers – compelling because it was real. IBM has led the industry in transforming businesses into e-businesses, completing thousands of e-business customer engagements. And inside the company, we've been working to transform IBM itself into the world's premier e-business.

While I haven't talked much in the past about our work to transform IBM – choosing instead to focus my public comments on customer and industry issues – behind the scenes we've been reengineering IBM from top to bottom, with one goal: to foster a high-performance culture and



turn IBM into the world's premier knowledge management company.

We believe very strongly that the age-old levers of competition – labor, capital and land – are being supplemented by knowledge, and that the most successful companies in the future will be those that learn how to exploit knowledge – knowledge about customer behavior, markets, economies, technology – faster and more effectively than their competitors. They will use knowledge to adapt quickly – seizing opportunities and improving products and services, of course, but just as important, renewing the way they define themselves, think and operate.

To support the rapid movement of ideas and knowledge across IBM, we're completing a more than \$400 million upgrade of our information technology infrastructure, including the largest single-company rollout ever of groupware – to 240,000 Lotus Notes users. We have created new compensation and rewards systems that foster a high-performance culture based on speed of execution and teamwork. Our knowledge management work is also paying off in prosaic areas, such as procurement. Knowing at all times the status of supply and demand of purchased goods has allowed us to leverage our worldwide volumes and negotiate more effectively, saving IBM \$4.2 billion since 1995.

To become the world's first truly knowledge-management-based company, you need great technology, but you also need lots of smart people. I've already discussed here some of our world-class technologies. What follow in this report are examples of the wonderful creativity of our nearly 270,000 people.

This team's job, of course, is not finished. We have one more peak to scale: a return to industry leadership. To be part of a true revolution is a rare privilege. For many generations, no such opportunity ever arises. For us, it has. When we started this journey five years ago, we focused on what was required to bring IBM back. We then came to realize that, in doing so, we were joining in the reinvention of the entire information technology industry. It's only within the past couple of years that the full scope of this revolution has become clear.

The rise of a globally connected world is changing everything. It's rewriting the basic assumptions of business, the economy and global society – and the new text reads like an IBM playbook. If IBM didn't exist – if we had disintegrated it five years ago – somebody would have to recreate us to lead this new era. (That's just what some of our competitors are trying to do.)

We have a chance to imagine new ways for people to interact, to govern themselves, to manage their businesses, to enhance their health, to teach their children. And we have the resources to do something about it – to push the technology further and faster than anyone else, and to turn it into real solutions, solutions that matter. Our customers and business partners are looking for someone to lead, and we intend to do it.

The women and men of the new IBM aren't daunted by that prospect. They're fired up by it. And so am I.

As you may know, I've committed to remain IBM's chairman and CEO for at least another five years. I've done so for two reasons.

First, the job I came here to do isn't complete. We've proved we could survive, when many had written us off for dead. We've proved we could grow, when most believed growth would come only to the small and fleet. And I believe we're proving IBM is relevant to the world of the future, when many saw us as an artifact of the past. Now, our task is to lead.

Second, I could not, frankly, think of anything else that would be nearly as much fun. If you love business – and I do – you want to be where the action is, where the marketplace is most dynamic, where the issues are the most urgent, where team creativity is at its most intense. The most important development in the global economy at the dawn of the 21st century is going on right now, and IBM is at its epicenter. This large, resourceful and vitally important company is truly coming into its own. Where else would anyone want to be?

* * * * *

I want to recognize one of our directors, who is retiring this year. Harold Brown has had an extraordinary association with IBM. He was a member of the Board from 1972 to 1977. After serving as U.S. Secretary of Defense, he rejoined the Board in 1981. I would like to thank Dr. Brown for his many years of support and service to our company, and express my personal gratitude for helping me during my transition into IBM.



Louis V. Gerstner, Jr.
Chairman and Chief Executive Officer

Of course the world is changing.

It never stops.

The technology.

The pace.

The players.

What's far more interesting is

what incites change.

Every revolution,

Every school of philosophy,

Every movement worth joining,

Every defining enterprise

starts the same way.

Not with the grand or distant,

but with something near and personal.

It starts the same way. Every time.

It starts **here.**



the new **World** economy

IN 1997, IBM UNVEILED CONTINUOUS SPEECH RECOGNITION FOR MANDARIN — a breakthrough from researchers in the Beijing research laboratory we opened in 1995. Letting Chinese-speaking people interact with a computer in the most natural way imaginable — by talking to it — our ViaVoice software extends the power of information technology to the world's most populous country, without asking its people to shoehorn their language and its 6,700 written characters onto a Western-style keyboard.

As IBM expands in the world's emerging markets — China, Central and Eastern Europe, India, the nations of Southeast Asia — we of course hire locally and make local investments. But more important, we help an economy mature. We transfer skills — through long-term relationships with governments, alliances with universities and joint ventures with local businesses. And we create technologies like ViaVoice that reflect the needs of people and their local culture. It's the difference between being *in* a market, and *of* a market.



starts

here



the **buzz** starts here

aS A RULE, WE DON'T LIKE TO INJECT JARGON INTO THE LANGUAGE OF INFORMATION TECHNOLOGY. But in 1997 we indulged ourselves. We coined the phrase "e-business" to talk about the value our customers derive from networked computing, to describe how they are reinventing their business models around networked transactions of every kind — among employees, with suppliers, with trading partners, and of course, with customers.

We've also found that e-business is a powerful, unifying message for IBM itself. As a customer makes its website the front door to the enterprise, the action shifts to powerful servers — the kind of industrial-strength computing systems IBM has built for decades.

With millions of potential customers coming through that cyber front door, our customers need heavy-duty transaction and database software — another of our strong suits. To plan their e-business strategy, they need expert assistance up front — the kind of solutions consulting we specialize in. And to implement their strategy fast and cost-effectively, they demand a range of services — like those from IBM Global Services, the world's leading information technology services provider. We completed thousands of e-business engagements last year, and we expect the number of our customers doing e-business will double in 1998.



Left to right:

Top row: Samir Arora, CEO, NetObjects; Keith McCall, Lotus Domino applications, and Doug Wilson, Lotus eSuite development; Jim Pertzborn, AS/400 development; Syd Jones, corporate advertising.
Middle row: Jennifer Kilian, e-business website; Oly Jimenez-Losada, e-business services; Sandesh Bhat and Maria Arbusto, e-business intranet.
Bottom row: Deborah Drakeford, Netfinity servers, and Ed Merenda, RS/6000 network computing integration and consulting; Dave Tryon, System/390 network computing, and Forrest Snowden, secure electronic transactions (SET).

US5704055 - DYNAMIC RECONFIGURATION OF MAIN STORAGE AND EXPANDED STORAGE BY MEANS OF A SERVICE CALL LOGICAL PROCESSOR - GEORGE JONEL; PLEASANT VALLEY, NY (US) GILHARA STEVEN GARDNER; WALKILL, NY (US) - SNAP CONTROL FOR RELOCATING ELEMENTS OF A GRAPHICAL USER INTERFACE - REDPATH SARAH D; CARY, NC (US) US5704041 - OBJECT INDEPENDENT SCOPING IN AN OPEN SYSTEM INTERCONNECTION SYSTEM - ALLEN W
LEADER RECOVERY IN A DISTRIBUTED COMPUTING ENVIRONMENT - BADOVINATZ PETER RICHARD; KINGSTON, NY (US) CHANDRA TUSHAR DEEPAK; ELMSFORD, NY (US) KIRBY ORVILLE THEODORE; PLEASANT VALLEY, NY (US) PER
TING A VOICE SAMPLE TO A VOICE ACTIVATED DATA PROCESSING SYSTEM - CLINE TROY LEE; CEDAR PARK, TX (US) ISENSEE SCOTT HARLAN; GEORGETOWN, TX (US) POSTON RICKY LEE; AUSTIN, TX (US) WERNER JON HARALD; OC
FOR MULTIPLE SPEED DATA COMMUNICATIONS SYSTEMS - BOGGS ANDREW KEITH; RALEIGH, NC (US) HOANG QUY N; RALEIGH, NC (US) JACOBS JOE; CHAPEL HILL, NC (US) MULLEN JOHN MARK; WAKE FOREST, NC (US) PURRINGT
WAYNE FREDERICK; JERICHO, VT (US) HEDBERG ERIK LEIGH; ESSEX JUNCTION, VT (US) US5703769 - POWER SWITCH WITH INRUSH CURRENT CONTROL - MURRAY THOMAS P; QUEENSVILLE (CA) US5703734 - DISC DRIVE HAVING A
JOHN S; WINCHESTER (GB) NEUBAUER JERRY LEE; STEWARTVILLE, MN (US) US5703684 - APPARATUS FOR OPTICAL DIFFERENTIAL MEASUREMENT OF GLIDE HEIGHT ABOVE A MAGNETIC DISK - LU HUIZONG; COCONUT CREEK, FL
PETERS; COLCHESTER, VT (US) US5703582 - DAC WITH FEEDBACK CONTROL FOR CURRENT SOURCE BIAS DURING NON-DISPLAY PERIOD - KOYAMA SEIJI; YAMATO (JP) NOZAWA TOHRU; SAGAMIHARA (JP) SUZUKI YASUSUKE; KANA
CT (US) XIAO PETER HONG; MOHEGAN LAKE, NY (US) US5703498 - PROGRAMMABLE ARRAY CLOCK/RESET RESOURCE - FURTEK FREDERICK CURTIS; MENLO PARK, CA (US) GOULD SCOTT WHITNEY; SOUTH BURLINGTON, VT (US) KE
THOMA ENDRE PHILIP; COLCHESTER, VT (US) US5703331 - CIRCUITIZED STRUCTURE INCLUDING FLEXIBLE CIRCUIT WITH ELASTOMERIC MEMBER BONDED THERETO - BRODSKY WILLIAM LOUIS; BINGHAMTON, NY (US) HERARD J
STRUCTURE AND FABRICATION - BERTIN CLAUDE LOUIS; SOUTH BURLINGTON, VT (US) HEDBERG ERIK LEIGH; ESSEX JUNCTION, VT (US) HOWELL WAYNE JOHN; SOUTH BURLINGTON, VT (US) KALTER HOWARD LEO; COLCHESTER,
US5702087 - ASEISMIC SUPPORT STRUCTURE - SUZUKI AKIRA; OHMIHACHIMAN (JP) SUZUKI HIROSHI; OHMIHACHIMAN (JP) TSUKAMOTO TAKESHI; OHTSU (JP) US5701654 - PRECISION FLUID HEAD TRANSPORT - CANESTARO MICH
LYNN; OSSINING, NY (US) US5701514 - SYSTEM PROVIDING USER DEFINABLE SELECTION OF DIFFERENT DATA TRANSMISSION MODES OF DRIVERS OF AN I/O CONTROLLER TRANSMITTING TO PERIPHERALS WITH DIFFERENT DATA
WITHIN A MULTIMEDIA PRESENTATION UTILIZING A DATA PROCESSING SYSTEM - JOHNSON WILLIAM J; FLOWER MOUND, TX (US) KELLER ROBERT SCOTT; GRAPEVINE, TX (US) MANTHURUTHIL GEORGE C; COPPELL, TX (US) WILLIA
HANDLING APPARATUS ALIEN TO THE OPERATING SYSTEM - BAKER ERNEST DYSART; BOCA RATON, FL (US) DINWIDDIE JOHN MONROE JR; WEST PALM BEACH, FL (US) GRICE LONNIE EDWARD; BOCA RATON, FL (US) JOYCE JAMES N
ONLINE PUBLICATIONS FORMATTED IN A BOOKMASTER FORMAT - GOACH KENNETH EDMUND JR; AUSTIN, TX (US) MEYER GREGORY PHILLIP; AUSTIN, TX (US) SIMS JEFFREY SCOTT; AUSTIN, TX (US) US5701495 - SCALABLE SY
YOUNGS AMY MAY; AUSTIN, TX (US) US5701489 - SYSTEM FOR PARTIAL IN-LINE EXPANSION OF PROCEDURE CALLS DURING PROGRAM COMPILATION - BATES CARY LEE; ROCHESTER, MN (US) WYMAN BLAIR; ROCHESTER, MN (US)
FOR PERFORMING DATA COMPRESSION BASED ON A LIU-ZEMPEL ALGORITHM - BENAYOUN ALAIN; CAGNES SUR MER (FR) FIESCHI JACQUES; SAINT LAURENT DU VAR (FR) LEPENNEC JEAN-FRANCOIS; NICE (FR) MICHEL PATRICK
RY LYNN; ROUND ROCK, TX (US) STEPHENS ALAN PALMER; AUSTIN, TX (US) US5701458 - SYSTEM AND METHOD FOR MANAGING ARBITRARY SUBSETS OF ACCESS CONTROL LISTS IN A COMPUTER NETWORK - BSAIBES MOUNIR
SAN JOSE, CA (US) PAYTON BRIAN GERRIT; SAN JOSE, CA (US) SIWEK HOWARD ALEXANDER; SAN JOSE, CA (US) US5701455 - METHOD AND APPARATUS FOR REORDERING COMPLEX SQL QUERIES USING A MODIFIED GENERALIZED
ALIZED INFERENCE PROPAGATION AND GENERALIZED TRANSITIVE CLOSURE - BHARGAVA GAUTAM; CUPERTINO, CA (US) GOEL PIYUSH; MONTE SERENO, CA (US) IYER BALAKRISHNA RAGMAVENDRA; SAN JOSE, CA (US) US5701451 -
IN COMPUTER SYSTEMS - ABALI BULENT; NEW YORK, NY (US) MRAZ RONALD; MILLWOOD, NY (US) US5701430 - CROSS-CACHE-LINE COMPOUNDING ALGORITHM FOR SCISM PROCESSORS - BLANER BARTHOLOMEW; NEWARK VALLE
VALE, CA (US) MICHOD CAROL S; TUCSON, AZ (US) NG CHAN YIU; SAN JOSE, CA (US) SHERMAN WILLIAM G II; TUCSON, AZ (US) STEFFAN JEFFREY R; SAN JOSE, CA (US) VAN GUNDY STEVEN R; GILROY, CA (US) US5701415 - METHOD
TX (US) US5701408 - METHOD FOR TESTING COMPUTER OPERATING OR APPLICATION PROGRAMMING INTERFACES - CORNELL JULIE EILEEN; FORT LAUDERDALE, FL (US) DIAZ JORGE LAZARO; THE WOODLANDS, TX (US) HO DEREK
LET GUY; MONTPELLIER (FR) STEIMLE ANDRE; EVRY (FR) US5701223 - SPIN VALVE MAGNETORESISTIVE SENSOR WITH ANTIPARALLEL PINNED LAYER AND IMPROVED EXCHANGE BIAS LAYER, AND MAGNETIC RECORDING SYSTEM U
CA (US) WILHOIT DENNIS RICHARD; MORGAN HILL, CA (US) US5701222 - SPIN VALVE SENSOR WITH ANTIPARALLEL MAGNETIZATION OF PINNED LAYERS - GILL HARDAYAL SINGH; PORTOLA VALLEY, CA (US) GURNEY BRUCE A; SAN
FOAMED POLYMER - HEDRICK JAMES LUPTON; PLEASANTON, CA (US) HEDRICK JEFFREY CURTIS; PARK RIDGE, NJ (US) LIAO YUN-HSIN; W. NYACK, NY (US) MILLER ROBERT DENNIS; SAN JOSE, CA (US) SHIH DA-YUAN; POUGHKEEPS
G; HOPEWELL JUNCTION, NY (US) US5700549 - STRUCTURE TO REDUCE STRESS IN MULTILAYER CERAMIC SUBSTRATES - GARANT JOHN J; HOPEWELL JUNCTION, NY (US) INDYK RICHARD F; WAPPINGERS FALLS, NY (US) US57003
NY (US) PURUSHOTHAMAN SAMPATH; YORKTOWN HEIGHTS, NY (US) ROLDAN JUDITH MARIE; OSSINING, NY (US) SARAF RAVI F; BRIARCLIFF MANOR, NY (US) SHAW JANE MARGARET; RIDGEFIELD, CT (US) VIEHBECK ALFRED; FISHK
PLATE - GOTH GARY FRANKLIN; PLEASANT VALLEY, NY (US) KEMINK RANDALL GAIL; POUGHKEEPSIE, NY (US) LOPARCO JOHN JOSEPH; POUGHKEEPSIE, NY (US) SCHMIDT ROGER RAY; POUGHKEEPSIE, NY (US) US5699679 - CRYOGE
SION STACKED VIAS FOR A MULTIPLE LAYER CIRCUIT BOARD STRUCTURE - CHONG KU HO; ARLINGTON HEIGHTS, IL (US) CROCKETT CHARLES HAYDEN JR; AUSTIN, TX (US) DUNN STEPHEN ALAN DECEASED; LATE OF GEORGETOWN
MULTIPROCESSOR - LE HUNG QUI; AUSTIN, TX (US) SO KIMMING; AUSTIN, TX (US) TRUONG BAO-BINH; AUSTIN, TX (US) US5699536 - COMPUTER PROCESSING SYSTEM EMPLOYING DYNAMIC INSTRUCTION FORMATTING - HOPKINS
DISPLAY - AMRO HATIM YOUSEF; AUSTIN, TX (US) US5699534 - MULTIPLE DISPLAY POINTERS FOR COMPUTER GRAPHICAL USER INTERFACES - BARBER RONALD JASON; SAN JOSE, CA (US) FORD DANIEL ALEXANDER; SAN JOSE, C
DITTO LOUIS FRANK; RALEIGH, NC (US) STAGG ARTHUR JAMES; RALEIGH, NC (US) WARD RAYMOND EDWARD; DURHAM, NC (US) US5699511 - SYSTEM AND METHOD FOR DYNAMICALLY VARYING LOW LEVEL FILE SYSTEM OPERATIO
DY KRISHNA KISHORE; AUSTIN, TX (US) US5699502 - SYSTEM AND METHOD FOR MANAGING COMPUTER SYSTEM FAULTS - SWANBERG RANDAL CRAIG; ROUND ROCK, TX (US) WILLIAMS MICHAEL STEPHEN; AUSTIN, TX (US) US56
PLEASANT VALLEY, NY (US) PERSHING JOHN ARTHUR JR; BUCHANAN, NY (US) US5699477 - METHOD TO BETTER DOCUMENT AND INTELLECTUAL PROPERTY PIRACY THROUGH INDIVIDUALIZATION - CHOW CHEE-SENG; BRIARCLIFF
PETER; AUSTIN, TX (US) SINGH RAJINDER PAUL; AUSTIN, TX (US) US5699466 - METHOD AND APPARATUS FOR A COMPUTATIONALLY RECOGNIZING REPEATED SHAPES FOR DATA COMPACTION - CHUNG VIRGINIA M; PLEASANT VALLEY, N
TANAIK SURYA; SAN JOSE, CA (US) SIMMONS RANDALL GEORGE; SAN JOSE, CA (US) US5699160 - OPTICAL APPARATUS FOR INSPECTING CASES TEXTURE; BARENBOIM MICHAEL; BOCA RATON, FL (US) BAUMGART PETER MICHAEL
BOYNTON BEACH, FL (US) LU HUIZONG; COCONUT CREEK, FL (US) PETERAL ANTHONY; FORT LAUDERDALE, FL (US) SENGH MONSIE; BOCA RATON, FL (US) TARRI ALI REZA; BOCA RATON, FL (US) TAM ANDREW CHING; SARATOG
LOCAL PARITY - WIDMER ALBERT X; KATONAH, NY (US) US5696985 - VIDEO PROCESSOR - CRUMP DWAYNE T; APEX, NC (US) PANCOAST STEVE T; RALEIGH, NC (US) US5696974 - METHODS TO SUPPORT MULTIMETHOD FUNCTION OV
PORTING MULTIMETHOD FUNCTION OVERLOADING WITH COMPILE-TIME TYPE CHECKING AND RUN-TIME DISPATCH - AGRAWAL RAKESH; SAN JOSE, CA (US) DEMICHELI LINDA GAIL; LOS ALTOS, CA (US) LINDSAY BRUCE GILBERT; S
MONTE SERENO, CA (US) IYER BALAKRISHNA R; SAN JOSE, CA (US) US5696947 - TWO DIMENSIONAL FRAME BUFFER MEMORY INTERFACE SYSTEM AND METHOD OF OPERATION THEREOF - JOHNS CHARLES R; AUSTIN, TX (US) RO
METHOD OF MANAGING MARKER ENTITIES WITHIN A DOCUMENT DATA STREAM - BARKER BARBARA A; ROUND ROCK, TX (US) EDEL THOMAS R; AUSTIN, TX (US) STARK JEFFREY A; GRAPEVINE, TX (US) US5696905 - SYSTEM AND M
GRAM PRODUCT FOR GROUP LEADER RECOVERY IN A DISTRIBUTED COMPUTING ENVIRONMENT - BADOVINATZ PETER RICHARD; KINGSTON, NY (US) CHANDRA TUSHAR DEEPAK; ELMSFORD, NY (US) KIRBY ORVILLE THEODORE; PI
- HEKMATPOUR AMIR; BURLINGTON, VT (US) US5696879 - METHOD AND APPARATUS FOR IMPROVED VOICE TRANSMISSION - CLINE TROY LEE; CEDAR PARK, TX (US) ISENSEE SCOTT HARLAN; GEORGETOWN, TX (US) PARKE FREDER
ING DESIRED ACCURACY - KOVACS LINDA ANNE; MAINE, NY (US) US5696709 - PROGRAM CONTROLLED ROUNDING MODES - SMITH RONALD MORTON SR; WAPPINGERS FALLS, NY (US) US5696656 - HIGHLY SENSITIVE ORTHOGONA
GLAS JOHNSON; FREMONT, CA (US) US5696654 - DUAL ELEMENT MAGNETORESISTIVE SENSOR WITH ANTIPARALLEL MAGNETIZATION DIRECTIONS FOR MAGNETIC STATE STABILITY - GILL HARDAYAL SINGH; PORTOLA VALLEY, CA (U
OWATONNA, MN (US) US5696643 - DISK DRIVE APPARATUS AND READ ERROR RECOVERY METHOD IN A DISK DRIVE APPARATUS - HARAKO FUJIO; FUJISAWA (JP) NAKAJIMA MICHIO; SAGAMIHARA (JP) OGASAWARA KENJI; FUJISAWA
SELKER EDWIN JOSEPH; PALO ALTO, CA (US) US5696030 - INTEGRATED CIRCUIT CONTACTS HAVING IMPROVED ELECTROMIGRATION CHARACTERISTICS AND FABRICATION METHODS THEREFOR - CRONIN JOHN EDWARD; MILTON,
TIN FRANK JOHN; NORTH KELVINSIDE (GB) US5695500 - SYSTEM FOR MANIPULATING MOVEMENT OF A SURGICAL INSTRUMENT WITH COMPUTER CONTROLLED BRAKE - KIM YONG-YIL; SEOUL (KR) TAYLOR RUSSELL HIGSMITH; OS
MO (US) EASTON JANET RHEA; WOODSTOCK, NY (US) FARRELL MARK STEVEN; PLEASANT VALLEY, NY (US) WEBB CHARLES FRANKLIN; POUGHKEEPSIE, NY (US) US5694616 - METHOD AND SYSTEM FOR PRIORITIZATION OF EMAIL IN
TIMED INTERFACE FOR A NETWORK OF COMPUTER PROCESSORS INTERCONNECTED IN PARALLEL - CAPOWSKI ROBERT STANLEY; VERBANK, NY (US) CASPER DANIEL FRANCIS; POUGHKEEPSIE, NY (US) DESNOYERS CHRISTINE MAR
- METHOD AND SYSTEM FOR OPTIMIZING ACCESS TO A DATASTORE - CANTIN GUYLAINE; TORONTO (CA) COPELAND GEORGE P; AUSTIN, TX (US) GHEITH AHMED M; ROUND ROCK, TX (US) SESSIONS ROGER H; AUSTIN, TX (US) US
INSTRUCTIONS FOR TEST PSW VALIDITY, LOAD WITH ACCESS TEST, AND CHARACTER TRANSLATION ASSIST - CHECK MARK ANTHONY; HOPEWELL JUNCTION, NY (US) FARRELL MARK STEVEN; PLEASANT VALLEY, NY (US) LIPTAY JO
ROBERT; APEX, NC (US) NUECHTERLEIN DAVID WILLIAM; DURHAM, NC (US) US5694583 - BIOS EMULATION PARAMETER PRESERVATION ACROSS COMPUTER BOOTSTRAPPING - DART CHARLES R II; BOCA RATON, FL (US) MERKIN ST
NOBUYUKI; SENDAI (JP) SHIMIZU SHIGENORI; KAWASAKI (JP) US5694573 - SHARED L2 SUPPORT FOR INCLUSION PROPERTY IN SPLIT L1 DATA AND INSTRUCTION CACHES - CHEONG HOICHI; TRAVIS COUNTY, TX (US) HICKS DWAIN
CAMERON; TUCSON, AZ (US) CANDELARIA SUSAN KAY; TUCSON, AZ (US) CORD JOEL HARVEY; TUCSON, AZ (US) HARTUNG MICHAEL HOWARD; TUCSON, AZ (US) HYDE JOSEPH SMITH; TUCSON, AZ (US) MCCAULEY JOHN NORBERT JR
- KAHLE JAMES A; AUSTIN, TX (US) LOPER ALBERT J; CEDAR PARK, TX (US) MALLICK SOUMMYA; AUSTIN, TX (US) OGDEN AUBREY D; ROUND ROCK, TX (US) US5694556 - DATA PROCESSING SYSTEM INCLUDING BUFFERING MECHANIS
ING MULTIMEDIA QUALITY OF SERVICE SESSIONS IN A COMMUNICATIONS NETWORK - BAUGHER MARK JOHN; AUSTIN, TX (US) VAN HORN ISABEL BERDEEN; AUSTIN, TX (US) US5694443 - APPARATUS FOR COUNTING ELECTRONIC C
M; ROCHESTER, MN (US) ZELINSKI MICHAEL J; ROCHESTER, MN (US) US5694407 - METHOD AND AN APPARATUS FOR MODIFYING A FCS - GLAISE RENE; NICE (FR) US5694400 - CHECKING DATA INTEGRITY IN BUFFERED DATA TRAN
GEN (DE) US5694362 - METHOD AND APPARATUS FOR HIGH SPEED COMPARISON - LATTIMORE GEORGE MCNEIL; AUSTIN, TX (US) LEASURE TERRY LEE; GEORGETOWN, TX (US) ZHANG KEVIN XIAOQIANG; AUSTIN, TX (US) US5694344
MICHAEL PATRICK; ENDICOTT, NY (US) US5694310 - THREE PHASE INPUT BOOST CONVERTER - MALIK RANDHIR SINGH; COLCHESTER, VT (US) WUNDERLICH RONNIE ARNO; ENDICOTT, NY (US) US5694170 - VIDEO COMPRESSION US
SHIRE (GB) KNOX ANDREW; KILBIRNIE (GB) US5694123 - KEYBOARD WITH INTEGRATED POINTING DEVICE AND CLICK BUTTONS WITH LOCK DOWN FOR DRAG OPERATION IN A COMPUTER SYSTEM WITH A GRAPHICAL USER INTERFA
- FERRAILOLO FRANK D; ESSEX JUNCTION, VT (US) GERSBACH JOHN E; BURLINGTON, VT (US) HAYASHI MASAYUKI; WILLISTON, VT (US) MASENAS CHARLES J JR; ESSEX JUNCTION, VT (US) NOVOF ILYA I; ESSEX JUNCTION, VT (US) U
MASENAS CHARLES J JR; ESSEX JUNCTION, VT (US) US5693928 - METHOD FOR PRODUCING A DIFFUSION BARRIER AND POLYMERIC ARTICLE HAVING A DIFFUSION BARRIER - EGITTO FRANK DANIEL; BINGHAMTON, NY (US) MATIEN
(US) US5692218 - SYSTEM FOR TRANSFERRING DATA BETWEEN INPUT/OUTPUT DEVICES HAVING SEPARATE ADDRESS SPACES IN ACCORDANCE WITH INITIALIZING INFORMATION IN ADDRESS PACKAGES (METHOD IN A DATA PRO
FLICT RESOLUTION APPARATUS - MEANEY PATRICK J; POUGHKEEPSIE, NY (US) SEIGLER ADRIAN E; POUGHKEEPSIE, NY (US) US5692207 - DIGITAL SIGNAL PROCESSING SYSTEM WITH DUAL MEMORY STRUCTURES FOR PERFORMIN
BEACH, FL (US) US5692205 - METHOD AND SYSTEM FOR INTEGRATION OF MULTIMEDIA PRESENTATIONS WITHIN AN OBJECT ORIENTED USER INTERFACE (METHOD WITHIN A DATA PROCESSING SYSTEM) - BERRY RICHARD E; GEOR
JR; WEST PALM BEACH, FL (US) US5692195 - PARENT CLASS SHADOWING (COMPUTER PROGRAM PRODUCT) - CONNER MIKE HADEN; AUSTIN, TX (US) MARTIN ANDREW RICHARD; AUSTIN, TX (US) RAPER LARRY KEITH; AUSTIN, TX (U
- BIOS EMULATION OF A HARD FILE IMAGE AS A DISKETTE (DATA PROCESSING SYSTEM) - WILLIAMS DONALD D; BOCA RATON, FL (US) US5692182 - BUFFERPOOL COHERENCY FOR IDENTIFYING AND RETRIEVING VERSIONS OF WORKING
ALLEN; SAN JOSE, CA (US) US5692180 - OBJECT-ORIENTED CELL DIRECTORY DATABASE FOR A DISTRIBUTED COMPUTING ENVIRONMENT - LEE HENRY; AUSTIN, TX (US) US5692174 - QUERY PARALLELISM IN A SHARED DATA DBMS

By now, it's become somewhat predictable.

The U.S. Patent Office announces the company that received the most new patent awards, and IBM's technical community takes a bow. In 1997, it happened again — for the fifth straight year. These pages contain some of the names of the technologies and the technologists behind some of our patent awards in 1997. (We received 1,724 of them, so we have had to use small print.) But

this roster isn't a monument to irrelevant brilliance.

We understand that capitalizing on our intellectual property is as important as creating it, and we do that in several ways. Fully one-third of last year's patented technologies have already been incorporated into IBM products. We also enter into cross-patent agreements that give us access to additional technologies and strengthen our total solutions capability. Finally,

(Y (US) KIM MOON JU: WAPPINGS FALLS, NY (US) KRYGOWSKI JETPAC: HOPEWELL JUNCTION, NY (US) PRESTON ALLEN HERMAN: POUGHKEEPSIE, NY (US) STUCKI DAVID EMME: POUGHKEEPSIE, NY (US) US5704050 DE C: DURHAM, NC (US) GODWIN JEREMY PHILIP: RALEIGH, NC (US) NIELSEN ROBERT LOUIS: ZUMIKON (CH) REDER PAUL JOSEPH: DURHAM, NC (US) TOLTZMAN DOUGLAS: HUBERT, NC (US) US5704032 - METHOD FOR GROUP SHING JOHN ARTHUR JR: BUCHANAN, NY (US) US5704012 - ADAPTIVE RESOURCE ALLOCATION USING NEURAL NETWORKS - BIGUS JOSEPH PHILLIP: ROCHESTER, MN (US) US5704009 - METHOD AND APPARATUS FOR TRANSMIT-EANSIDE, CA (US) US5703878 - METHOD OF TRANSFERRING STRUCTURED DATA OF CONSTANT BIT RATE TRAFFIC IN AN ATM NETWORK - DUALUT MAURICE: SAINT LAURENT DU VAR (FR) US5703872 - INTELLIGENT CONCENTRATOR ON CHALLIS: RALEIGH, NC (US) WEAVER LAURA A: DURHAM, NC (US) US5703823 - MEMORY DEVICE WITH PROGRAMMABLE SELF-REFRESHING AND TESTING METHODS THEREFORE - DOUSE DAVID ELSON: JERICO, VT (US) ELLIS INTEGRAL GASKET AND CONTINUOUS OUTER PERIMETER SHOCK BUMPER - BERBERICH JAMES WILLIAM: SAN JOSE, CA (US) BERG LOWELL JAMES: ROCHESTER, MN (US) BOUTAGHOU ZINE-EDDINE: ROCHESTER, MN (US) HEATH (US) TAHERI ALI REZA: BOCA RATON, FL (US) US5703622 - METHOD FOR IDENTIFYING VIDEO PIXEL DATA FORMAT IN A MIXED FORMAT DATA STREAM - EVANS EDWARD KELLEY: ESSEX JUNCTION, VT (US) WEST RODERICK MICHAEL GAWA-KEN (JP) TERUKINA ASAO: YAMATO (JP) US5703578 - FOLDING KEYBOARD - ALLISON JEFFERY DANIEL: SEATTLE, WA (US) US5703532 - FULLY DIFFERENTIAL SELF-BIASED SIGNAL RECEIVER - SHIN HYUN JONG: RIDGEFIELD, YSER FRANK RAY III: COLCHESTER, VT (US) WORTH BRIAN A: MILTON, VT (US) ZITTRITSCH TERRANCE JOHN: WILLISTON, VT (US) US5703495 - DATA OUTPUT IMPEDANCE CONTROL - SARTWELL ALFRED LEONARD: JERICO, VT (US) MES DANIEL: VESTAL, NY (US) MACEK THOMAS GEORGE: ENDICOTT, NY (US) SHARP TIMOTHY LEE: BERKSHIRE, NY (US) SHOVLVSKY GEORGE JOSEPH: OWEGO, NY (US) US5702984 - INTEGRATED MULTICHIP MEMORY MODULE, VT (US) KELLEY GORDON ARTHUR JR: ESSEX JUNCTION, VT (US) US5702756 - PROCESS FOR MAKING A THIN FILM MAGNETIC HEAD - MCKEAN DENNIS RICHARD: CUPERTINO, CA (US) RENALDO ALFRED FLOYD: SAN JOSE, CA (US) AEL JAMES: ENDICOTT, NY (US) US5701647 - METHOD FOR MAKING AN ISOLATED SIDEWALL CAPACITOR HAVING A COMPOUND PLATE ELECTRODE - KOTECKI DAVID EDWARD: HOPEWELL JUNCTION, NY (US) SAENGER KATHERINE TRANSMISSION RATE - KEENER DON STEVEN: BOCA RATON, FL (US) MOORE GREGORY JAMES: BOCA RATON, FL (US) US5701510 - METHOD AND SYSTEM FOR EFFICIENT DESIGNATION AND RETRIEVAL OF PARTICULAR SEGMENTS MS MARVIN L: LEWISVILLE, TX (US) US5701502 - ISOLATING A CENTRAL PROCESSING UNIT FROM THE OPERATING SYSTEM CONTROLLING SAID UNIT AND ITS ASSOCIATED HARDWARE FOR INTERACTION OF THE UNIT WITH DATA AUICE: BOCA RATON, FL (US) LOFFREDO JOHN MARIO: DEERFIELD BEACH, FL (US) SANDERSON KENNETH RUSSELL: WEST PALM BEACH, FL (US) US5701498 - METHOD AND APPARATUS FOR A STRUCTURED ASCII BROWSER FOR INTERRUPT STRUCTURE FOR A MULTI-PROCESSING SYSTEM - ARNDT RICHARD LOUIS: AUSTIN, TX (US) NICHOLSON JAMES OTTO: AUSTIN, TX (US) SILHA EDWARD JOHN: AUSTIN, TX (US) THURBER STEVEN MARK: AUSTIN, TX (US) US5701486 - TRACING TECHNIQUE FOR APPLICATION PROGRAMS USING PROTECT MODE ADDRESSING - GILBERTSEN TODD ANDREW: ROCHESTER, MN (US) KNIGHT STEPHEN ARTHUR: ROCHESTER, MN (US) US5701468 - SYSTEM AGAUDE (FR) US5701465 - METHOD AND APPARATUS FOR RESERVING SYSTEM RESOURCES TO ASSURE QUALITY OF SERVICE - BAUGHER MARK JOHN: AUSTIN, TX (US) CHANG PHILIP YEN-TANG: AUSTIN, TX (US) MORRIS GREGO-MILE: AUSTIN, TX (US) KELLS TIMOTHY ROGER: ROUND ROCK, TX (US) US5701456 - SYSTEM AND METHOD FOR INTERACTIVELY FORMULATING DATABASE QUERIES USING GRAPHICAL REPRESENTATIONS - JACOPI TOM WILLIAM: OUTER JOIN OPERATOR - BHARGAVA GAUTAM: CUPERTINO, CA (US) GOEL PIYUSH: MONTE SERENO, CA (US) IYER BALAKRISHNA RAGMAVENDRA: SAN JOSE, CA (US) US5701454 - SIMPLIFICATION OF SQL QUERIES USING GENER-METHOD FOR FULLFILLING REQUESTS OF A WEB BROWSER - LAGARDE KONRAD CHARLES: MILFORD, CT (US) ROGERS RICHARD MICHAEL: BEACON, NY (US) US5701446 - METHOD FOR FINE GRAIN ADJUSTMENTS TO SYSTEM TIME EY, NY (US) JEREMIAH THOMAS LEO: ENDWELL, NY (US) US5701429 - METHOD AND SYSTEM FOR MAINTAINING CONCURRENT DATA ACCESS DURING DEVICE UPGRADE - LEGVOLD VERNON J; TUCSON, AZ (US) LIU JULIA: SUNNY-FOR CREATING STUB FILE SUPPORTING REMOTE PROCEDURE CALLS BY GENERATING COMMON CODE INCLUDING CODE UTILIZED BY STUB PROCEDURES TO INVOKE PLURALITY OF SERVICE PROCEDURES - WEI YI-HSIU: AUSTIN, K WAN HOK: MIAMI, FL (US) NGUYEN SON DUC: BOYNTON BEACH, FL (US) TRAN CUONG HUU: BOCA RATON, FL (US) US5701397 - CIRCUIT FOR PRE-CHARGING A FREE NEURON CIRCUIT - LOUIS DIDIER: FONTAINEBLEAU (FR) PAIL-ING THE SENSOR - FONTANA ROBERT EDWARD JR: SAN JOSE, CA (US) GURNEY BRUCE ALVIN: SANTA CLARA, CA (US) LIN TSANN: SARATOGA, CA (US) SPERIOSU VIRGIL SIMON: SAN JOSE, CA (US) TSANG CHING HWA: SUNNYVALE, TA CLARA, CA (US) US5701219 - SPACER FOR PROVIDING SUPPORT AND A TRANSDUCER PARKING STRUCTURE IN A DISK DRIVE ASSEMBLY - SHAFI: MATHEW KAYHAN: CAMPBELL, CA (US) US5700844 - PROCESS FOR MAKING A SIE, NY (US) US5700581 - SOLVENT-FREE EPOXY BASED ADHESIVES FOR SEMICONDUCTOR CHIP ATTACHMENT AND PROCESS - BERGER MICHAEL; GARDINER, NY (US) CHACE MARK S; POUGHKEEPSIE, NY (US) SACHDEV KRISNA 98 - COMPOSITION CONTAINING A POLYMER AND CONDUCTIVE FILLER AND USE THEREOF - ANGELOPOULOS MARIE; CORTLANDT MANOR, NY (US) BRUSIC VLASTA A: AMAWALK, NY (US) GRAHAM TERESITA ORDONEZ: IRVINGTON, ILL, NY (US) US5700380 - SIMPLIFIED METHOD OF MAKING VIAS FOR MERGED MR HEAD - KROUNBI MOHAMAD TOWFIK; SAN JOSE, CA (US) LEE JAMES HSI-TANG; SAN JOSE, CA (US) US5699853 - COMBINED HEAT SINK AND SINK IC AEROSOL SEPARATOR - CAVALIERE WILLIAM ALBERT: VERBANK, NY (US) NORUM JAMES PATRICK: MILLWOOD, NY (US) SCHMITZ STEFAN; PLEASANT VALLEY, NY (US) WU JIN JWANG: OSSINING, NY (US) US5699613 - FINE DIMEN-, TX (US) HOEBENER KARL GRANT; GEORGETOWN, TX (US) MCMASTER MICHAEL GEORGE; VERNONIA, OR (US) US5699538 - EFFICIENT FIRM CONSISTENCY SUPPORT MECHANISMS IN AN OUT-OF-ORDER EXECUTION SUPERSCALER MARTIN EDWARD: CHAPPAQUA, NY (US) NAIR EDWIN BARK; BRIARCLIFF MANOR, NY (US) US5699533 - METHOD, MEMORY AND APPARATUS FOR AUTOMATICALLY RESIZING A PLURALITY OF WINDOWS DISPLAYED ON A COMPUTER (US) SELKER EDWIN JOSEPH; PALO ALTO, CA (US) US5699532 - DYNAMIC MULTIPATH CHANNEL INTERFACE FOR INPUT/OUTPUT CHANNELS - BARNETT LINDA; RALEIGH, NC (US) LONG LYNN DOUGLAS; CHAPEL HILL, NC (US) MEN-N TIMEOUT PARAMETERS IN NETWORK SYSTEMS OF VARIABLE BANDWIDTH - PORCARO THOMAS JOSEPH: AUSTIN, TX (US) WALDRON THEODORE CLAYTON III: AUSTIN, TX (US) WARD RICHARD BYRON: AUSTIN, TX (US) YELLEPED-99501 - SYSTEM FOR GROUP LEADER RECOVERY IN A DISTRIBUTED COMPUTING ENVIRONMENT - BADOVINO PETER RICHARD: KINGSTON, NY (US) CHAMBERLA TUSHAR DEEPAK: ELMSFORD, NY (US) KIRBY ORVALLE THEODORE; MANOR, NY (US) KUTTEN SHAY; ROCKAWAY, NJ (US) YUNG MARCELL BERDECHAY: NEW YORK, NY (US) US5699288 - COMPARE CIRCUIT FOR CONTENT-ADDRESSABLE MEMORIES - KIM SONG JHIN; TEMPLE, TX (US) LIU PEICHUN Y (US) STUART JAMES E: HOPEWELL JUNCTION, NY (US) US5699282 - METHOD OF ELECTROSTATIC DISCHARGE PROTECTION OF MAGNETIC HEADS IN A MAGNETIC STORAGE SYSTEM - BERPELING A DAVID; SAN JOSE, CA (US) PAT-; SAN JOSE, CA (US) CHRUSCH PETER P: BOYNTON BEACH, FL (US) HARRER BENNY MICHAEL; BOCA RATON, FL (US) KARRI BELA MIN; SAN JOSE, CA (US) KERSTENS PIETER J M; BOCA RATON, FL (US) LISANKE MICHAEL GERARD; A, CA (US) US5699082 - ENHANCED PROGRAM METHODS IN A GRAPHICAL USER INTERFACE - MARIN EDWARD FRANKLIN: SAN JOSE, CA (US) SELKER EDWIN JOSEPH; PALO ALTO, CA (US) US5699082 - TRANSMISSION CODE HAVING ERLDAGING WITH COMPILE-TIME TYPE CHECKING - AGRAWAL RAKESH; SAN JOSE, CA (US) DE MICHIEL LINDA GAIL; LOS ALTOS, CA (US) LINDSAY BRUCE GILBERT; SAN JOSE, CA (US) US5696973 - INDEX-BASED METHOD FOR SUP-N JOSE, CA (US) US5696960 - COMPUTER PROGRAM PRODUCT FOR ENABLING A COMPUTER TO GENERATE UNIQUENESS INFORMATION FOR OPTIMIZING AN SQL QUERY - BHARGAVA GAUTAM: CUPERTINO, CA (US) GOEL PIYUSH; BERSON JOHN T; AUSTIN, TX (US) US5696932 - METHOD AND SYSTEM FOR ESTIMATING MINIMUM REQUIREMENTS ON A CACHE IN A COMPUTER BASED STORAGE SYSTEM - SMITH KEVIN FRANK; SAN JOSE, CA (US) US5696918 - EETHOD FOR PROVIDING MERCHANT INFORMATION AND ESTABLISHING LINKS TO MERCHANTS WHILE PRESENTING A MOVIE - REIMER JAMES A; MORGAN HILL, CA (US) REINSCH ROGER A; CUPERTINO, CA (US) US5696896 - PRO-EASANT VALLEY, NY (US) PERSHING JOHN ARTHUR JR; BUCHANAN, NY (US) US5696885 - EXPERT SYSTEM AND METHOD EMPLOYING HIERARCHICAL KNOWLEDGE BASE, AND INTERACTIVE MULTIMEDIA/HYPERMEDIA APPLICATIONS IC IRA; AUSTIN, TX (US) POSTON RICKY LEE: AUSTIN, TX (US) ROGERS GREGORY SCOTT; AUSTIN, TX (US) WERNER JON HARALD; AUSTIN, TX (US) US5696713 - METHOD FOR FASTER DIVISION BY KNOWN DIVISOR WHILE MAINTAIN-SPIN VALVE READ HEAD - GILL HARDYAL SINGH; PORTOLA VALLEY, CA (US) GURNEY BRUCE A; SANTA CLARA, CA (US) SMYTH JOSEPH FRANCIS; LOS ALTOS, CA (US) SPERIOSU VIRGIL SIMON; SAN JOSE, CA (US) WERNER DOU-S) PINARBASI MUSTAFA; MORGAN HILL, CA (US) US5696649 - ELASTIC INSERT SHROUD TO PROVIDE MAXIMUM EFFECTIVE SHROUding SHOCK MITIGATION AND FILTERING IN HIGH SPEED DISK DRIVES - BOUTAGHOU ZINE-EDDINE; (JP) SUDA KATSUMI; SAGAMIHARA (JP) TSUWAKO KAZUSHI; MACHIDA (JP) YONEDA ISAO; YOKOHAMA (JP) US5696535 - GRAPHICS DISPLAY POINTER WITH INTEGRATED SELECTION - RUTLEDGE JOSEPH DELA; MAHOPAC, NY (US) VT (US) US5695864 - ELECTRONIC DEVICE USING MAGNETIC COMPONENTS - SLONCZEWSKI JOHN CASIMIR; KATONAH, NY (US) US5695582 - METHOD AND APPARATUS FOR BONDING - BEETESON JOHN S; SKELMORLIE (GB) MAR-SINING, NY (US) US5694617 - SYSTEM FOR PRIORITIZING QUIESCE REQUESTS AND RECOVERING FROM A QUIESCENT STATE IN A MULTIPROCESSING SYSTEM WITH A MILLI-MODE OPERATION - CHEUNG MING H; CAPE GIRARDEAU, TEMS BY SELECTIVELY ASSOCIATING PRIORITY ATTRIBUTE WITH AT LEAST ONE AND FEWER THAN ALL OF THE RECIPIENTS - JOHNSON WILLIAM J; FLOWER MOUND, TX (US) WEBER OWEN W; COPPELL, TX (US) US5694612 - SELF-E; PINE BUSH, NY (US) FERRAILO FRANK DAVID; NEW WINDSOR, NY (US) GARMIRE DERRICK LEROY; KINGSTON, NY (US) HALMA MARTEN JAN; POUGHQUAG, NY (US) STUBBS ROBERT FREDERICK; SAUGERTIES, NY (US) US5694597 694595 - REMOTE USER PROFILE MANAGEMENT ADMINISTRATION IN A COMPUTER NETWORK - IBANEZ JESUS GERARDO; AUSTIN, TX (US) JACOBS DWAYNE CHARLES; FLORENCE, SC (US) US5694587 - SPECIALIZED MILLICODE HN STEPHEN; RHINEBECK, NY (US) WEBB CHARLES FRANKLIN; POUGHKEEPSIE, NY (US) US5694585 - PROGRAMMABLE MEMORY CONTROLLER AND DATA TERMINAL - BROWN CHAR L; ROCHESTER, MN (US) FOSTER TONY D; ROCHESTER, MN (US) IHRKE JAMES H; ROCHESTER, MN (US) SIMON GERALD F; ORONOCH ANLEY L; LAKEWORTH, FL (US) WILLIAMS DONALD D; BOCA RATON, FL (US) US5694575 - DIRECT I/O CONTROL SYSTEM WITH PROCESSOR, MAIN MEMORY, AND MEMORY CONTROLLER - BROWN CHAR L; ROCHESTER, MN (US) FOSTER TONY D; ROCHESTER, MN (US) IHRKE JAMES H; ROCHESTER, MN (US) SIMON GERALD F; ORONOCH ANLEY L; LAKEWORTH, FL (US) WILLIAMS DONALD D; BOCA RATON, FL (US) US5694575 - DIRECT I/O CONTROL SYSTEM WITH PROCESSOR, MAIN MEMORY, AND MEMORY CONTROLLER - BROWN CHAR L; ROCHESTER, MN (US) FOSTER TONY D; ROCHESTER, MN (US) IHRKE JAMES H; ROCHESTER, MN (US) SIMON GERALD F; ORONOCH ANLEY L; LAKEWORTH, FL (US) WILLIAMS DONALD D; BOCA RATON, FL (US) US5694575 - DIRECT I/O CONTROL SYSTEM WITH PROCESSOR, MAIN MEMORY, AND MEMORY CONTROLLER - BROWN CHAR L; ROCHESTER, MN (US) FOSTER TONY D; ROCHESTER, MN (US) IHRKE JAMES H; ROCHESTER, MN (US) SIMON GERALD F; ORONOCH ANLEY L; LAKEWORTH, FL (US) WILLIAMS DONALD D; 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overnight success starts



PART OF THE FUN IN THE INFORMATION TECHNOLOGY INDUSTRY IS WAITING FOR THE NEXT METEOR — the hot startup that rockets from obscurity behind a new piece of hardware or some hot software. They're fun to watch, and you can sometimes observe their entire life cycle before the seasons change. It takes a bit more patience to track solutions to the industry's biggest challenges — in artificial intelligence, materials science, mathematics, complex algorithms for language recognition. These are challenges only the deepest, most committed, talented and, yes, stubborn teams take on.

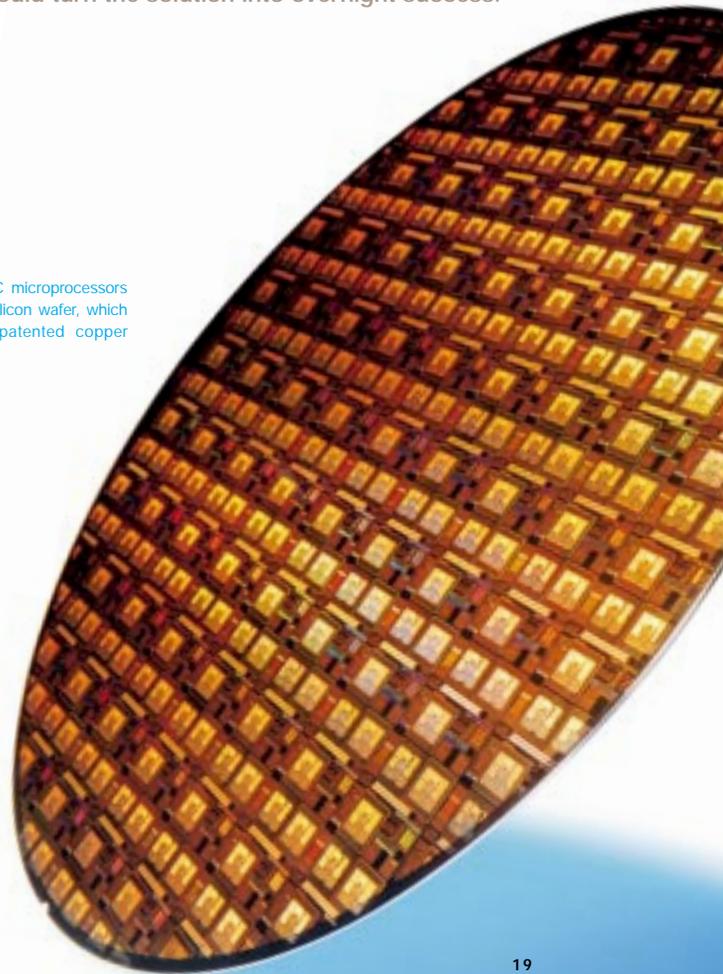
For nearly 30 years, the entire semiconductor industry looked for ways to gain the performance advantages of using copper (which conducts electricity 40 percent faster than aluminum) in

the tiny, tiny wires inside computer microchips. Last fall, IBM scientists won the race — if a generation-long journey can be called that. Perhaps just as astounding was our schedule to bring copper chips from the lab into production and to the market by this summer.

With this breakthrough, semiconductor devices like microprocessors and memory chips can be made more powerful, less expensive, smaller and more energy efficient.

Only a handful of companies have the staying power to lay siege to challenges like this one. Only one could turn the solution into overnight success.

Hundreds of PowerPC microprocessors are etched into this silicon wafer, which incorporates IBM's patented copper circuitry technology.







world records start here

LIKE MOST STUNNING TECHNOLOGICAL FEATS, OUR SUCCESS IN HARD-DISK DRIVES BEGINS WITH GENIUS; in this case, scientists and engineers whose special gift is knowing how to pack information into ever-smaller physical spaces. In 1997 they delivered the world's highest-capacity hard drives — compact units about the size of an audiocassette — and surpassed their own world record for hard-disk drive capacity, cramming each square inch of disk space with the equivalent of an 18-story-high stack of double-spaced typed pages.

As striking as the technology leadership is, there's an even bigger story of marketplace leader-

ship and global teamwork: researchers in California; engineers in Japan and the United States (who integrate the components in lightweight, rugged packaging); and the efficiency of high-volume manufacturing teams around the world, who produce low-cost, high-quality drives that we sell to more than 60 other companies, many of them our competitors.

Today, two in five laptop computers in the world contain an IBM hard-disk drive. That's one reason why this business grew roughly twice as fast as the rest of the disk drive industry last year.



Java didn't start here

THAT'S OK. Occasionally, you've got to be big enough to tip your cap to a competitor, and smart enough to build on something that can reshape the way software is developed and shared.

So we didn't do Java first. But IBM and Lotus are doing plenty of firsts with Java. Lotus's new eSuite "applets" are redefining personal productivity applications like word processors and spreadsheets. With



Enterprise JavaBeans, IBM and Lotus are taking Java into the world of high-volume transaction processing. And more than 200 software developers are working with IBM to create Java frameworks for general ledger, order entry and other business functions as a part of IBM's "San Francisco" project.

Two years ago, IBM had two Java professionals. Today, nearly 2,500, more than any other company.

Our people are busy right now, in more than 20 locations in 13 countries, including China, Latvia, Belarus, India, Canada, the United States and the United Kingdom. Because Java represents a revolution. And we've taken a stand.



IT'S ONE THING TO ENVISION AN INFORMATION TECHNOLOGY STRATEGY. It's another to identify the technology components of that strategy. But without the ability to implement — quickly, cost-effectively, and with minimal complexity — what have you got? Piece parts and a plan.

Customer demand for help with the hard work of implementation drives the fastest-growing part of the information technology industry, and not coincidentally, it's our fastest-growing business. It describes a way of working with customers that's an enduring strength of IBM. In a word, service. Everything from computer installation and testing to the work of command centers like this one, where we monitor performance across scores of customer networks and head off problems before anyone knows about them.

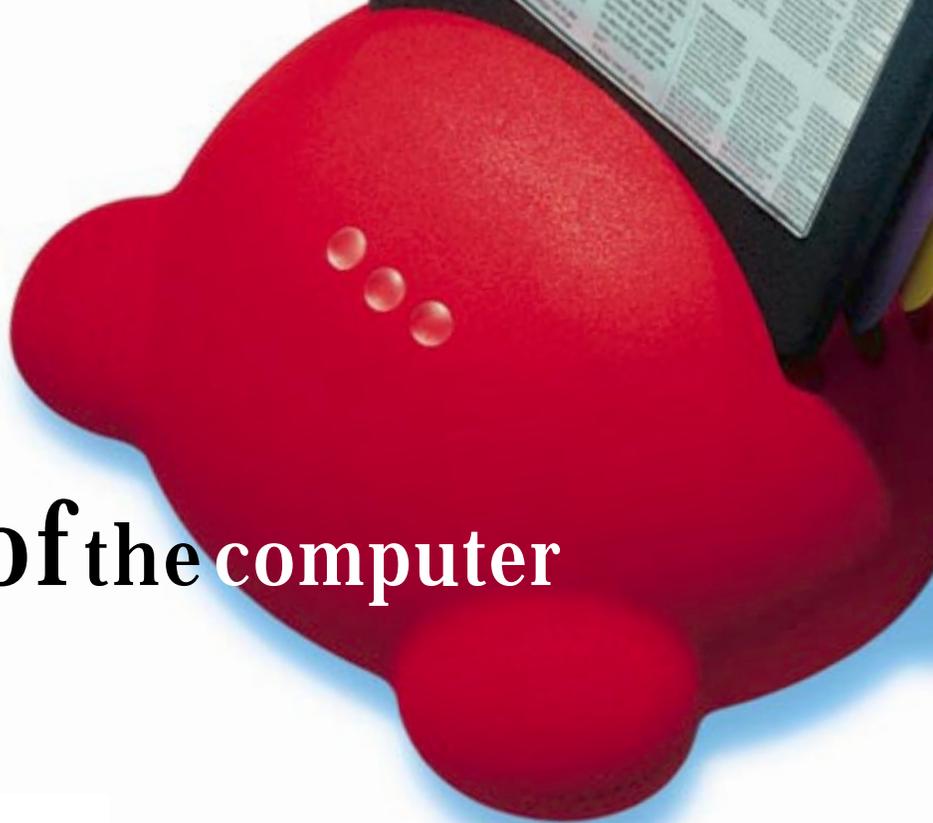
IBM Global Services is now a \$19 billion franchise — one that's grown in double digits every quarter for five straight years. In 1997 alone, we hired 15,000 people for this business. And as we enjoy this explosive growth, we also take pride in the fact that our customers rate the quality of our service the best in the industry.

the **finish** line starts



here

Charles Beauman operations analyst,
IBM Global Services Command Center, Boulder, Colorado



the **end** of the computer

starts
here



COMPUTERS USED TO LOOK PRETTY CLUNKY — nondescript boxes, lots of wires, plenty of beige. They used to look like, well... computers. No more. From the acclaimed Aptiva home PC, to the geometric grace of the ThinkPad — already displayed in New York's Museum of Modern Art — IBM designers create products that are as aesthetically pleasing — and comfortable to live with — as they are powerful. And in collaboration with IBM researchers, they're drafting the concept designs that could be the icons of tomorrow.

Bob Steinbugler product designer



(far left)

ThinkPad companion. With detachable stereo speakers this lightweight, portable CD-ROM drive supports multimedia computing and plays stereo audio discs.

(left)

Personal electronic newspapers. This concept network device allows you to receive customized news, e-mail and other content from the Net loaded into lightweight tablets — one for each person in your household. Update content and recharge batteries by placing the tablets back in the docking station.

(right)

Portable Digital Video. From our design lab in Japan comes a concept for a portable entertainment center based on Digital Video Disk (DVD) technology. Two stereo speakers swing away to reveal an LCD screen, and the two top “antennae” are removable microphones, for those impromptu karaoke sessions.

(right below)

Two-in-one. This prototype integrates a network computer with a flat panel display — a full-function desktop system that relies on the Net for applications and processing power.



There's more going on here than black paint and rounded edges. Microchips are becoming so inexpensive they can be embedded in virtually everything — so common, some people call them “jelly beans.” We'll cook with this “embedded intelligence.” We'll wear it, drive it (and drive over it), talk to it, sleep on it. All manner of consumer items will join the web of interconnected computing devices — but soon, no one will sit down at “the computer” anymore. Won't that be wonderful?

THERE IS THE LANGUAGE OF INFORMATION TECHNOLOGY: Java, parallelism, areal densities, polymorphism in object-oriented programming. And there is the language of business: return on investment, supply chain management, customer care. A company that wants to hold its own in any important conversation about business and information technology strategy has to speak both.

The IBM people who have these conversations with our largest customers are members of what we call Industry Solution Units. Each one of the 11 industries we serve is represented by one of the client executives on these pages. They're among 17,000 IBM experts responsible for our business with 20,000 customers,

representing about 70 percent of our 1997 revenue. At their fingertips are the resources of the world's greatest information technology research and development organization.

Our client and research teams have developed more than 250 industry-specific solutions — many of them built as "first of a kind" projects — working directly with our customers.

It's not easy amassing a cadre of business experts. Nor can just anyone build world-class R&D capability. To start the conversation, you need the former. To complete that conversation, you need both.

the conversation starts

here

here

here

here

here

IBM Industry specialists (left to right):

Robert Barthelmes Education; Paul Gryns Manufacturing; Françoise LeGoues Utilities & Energy; Jeffry Ullman Travel & Transportation; Nallu Reddy Telecommunications & Media; Robert Durot Process & Petroleum; John Wilson Wholesale/Distribution; James Pintar Insurance; Gail Gulinson Healthcare; Jim Martin Government; Nelson Eng Banking, Finance & Securities; pictured in Manhattan, New York



here

here

here

here

here

here

everything
starts here



SUSAN CRAYNE IS AN IBM RESEARCH SCIENTIST WITH A SINGULAR PASSION FOR THE FUTURE. It starts small. At home. With the little 4-year-old wonder you see here – Sara Crayne-Dedrick.

While Susan's passion starts with something very personal and private, it encompasses the entire world of children. Susan and more than a dozen fellow IBM researchers develop technologies as part of an IBM grant program called Reinventing Education. The \$35 million initiative is dedicated to helping children reach world-class academic standards through innovative technology solutions.

IBM's work in education is one emblem of a powerful intangible that attracts good people to our company – a sense of social responsibility, the desire to work for a company with the resources and the will to make the world a better place.

In a region of South Africa labeled an "educational disaster area" in 1996 by Deputy President Thabo Mbeki, IBM Reinventing Education grants helped equip schools and train teachers on how technology can help them develop innovative curricula. So far, 237 teachers have trained there, improving educational opportunities for some 6,300 students. Nine hundred IBM PCs are in use in the schools – and after hours they're available for adult education and to small business owners. We've launched similar Reinventing Education initiatives in Brazil and will start others like it in Ireland, India and Vietnam.

In 1997, IBM gave more than \$100 million to programs for people in need, including corporate contributions and donations from the IBM International Foundation. Individual employees gave another \$30 million in matching grants

and donations to nonprofit organizations and educational institutions in the communities where we work and raise our families. Each year IBM provides several million dollars' worth of new technology to more than 1,600 U.S. nonprofit health and human services organizations through the United Way's network of agencies. We also gave of ourselves. IBM employees volunteered nearly 4 million hours of service.

IBM grants are allowing millions of people to enjoy the treasures of the State Hermitage Museum in St. Petersburg and the Vatican Library, where priceless but perishable collections are being preserved through the power of information technology. In Peru, a partnership with the Pontifical Catholic University developed a computer-aided reconstruction system to restore ancient Moche figures on the ceiling of an aging temple.

We're a company committed to a culture of inclusion, a workforce as diverse as the cultures, perspectives and human characteristics in the more than 160 countries where we do business. Our longstanding commitment to workforce diversity was recognized recently in a ceremony at the U.S. White House, when IBM received the first annual Ron Brown Award for Corporate Leadership.

Of course, IBM exists to deliver solid financial results, and healthy returns to our investors. But it's not all we do, or all we are. In a world too frequently beset by intolerance, fear, hunger and illiteracy, some of us are in a position to help. We count ourselves among the fortunate – not only able to help, but having the responsibility and the desire to help.

97startshere

January 9

IBM launches a free U.S. Patent Search website (www.ibm.com/patents) that provides access to more than 2 million patents issued by the U.S. Patent and Trademark Office from 1974 to present.

March 18

IBM introduces IntelliStation, a line of Microsoft Windows NT-based workstations for commercial users. The new family complements IBM's RS/6000 line of UNIX workstations and servers.

March 19

IBM announces its intent to purchase a majority interest in NetObjects, the Silicon Valley-based company that developed the award-winning NetObjects Fusion software for designing and building websites.

April 29

IBM's Board of Directors approves a quarterly dividend increase of 14 percent and the repurchase of \$3.5 billion in shares.

May 8

IBM announces plans to become sole proprietor of Advantis — the U.S. data network services arm of the IBM Global Network, one of the world's largest data networks — by buying Sears' 30 percent equity interest for \$450 million.

May 9

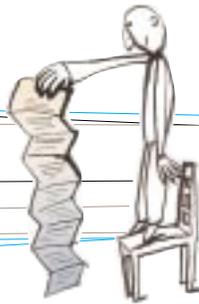
IBM's common stock splits, entitling each shareholder to receive one additional share for each share held.

May 13

IBM's stock price reaches 177 1/8 (pre-split), passing the previous all-time intraday high of 176 1/8 on August 20, 1987.



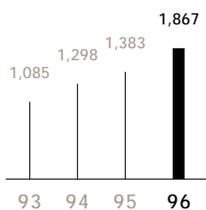
IBM's stock price closes at \$76.62 (split-adjusted) the first business day of 1997.



jan13

For the fourth consecutive year, IBM surpasses its own record for U.S. patents. In 1996, IBM was issued 1,867 patents from the U.S. Patent and Trademark Office — 326 more than the closest company.

IBM U.S. Patents



mar10

IBM announces Magic 3D Coloring Book, the first in a series of award-winning Crayola interactive multimedia products that inspire creativity and learning among young children.

may11

In a six-game match that captures the imagination of the world, a chess-playing IBM computer known as Deep Blue defeats chess grand-master Garry Kasparov — the first time a reigning world champion loses a match to a computer opponent in tournament play. Deep Blue is an IBM RS/6000 SP super-computer capable of calculating 200,000,000 chess positions per second. Its watershed win touches off debate, commentary and serious thinking about the relationship between people and machines, and about the very nature of thought.

May 19

The Space Shuttle carries 11 IBM ThinkPads into orbit. Combined, the ThinkPads can process more than half a billion instructions per second.

June 16

Three IBM scientists — Robert Dennard, Mark Dean and Dennis Moeller — are inducted into the National Inventors Hall of Fame, joining the ranks of Thomas Edison, Henry Ford, Louis Pasteur and IBM Nobel laureates Heinrich Rohrer and Gerd Binnig. To date, only 137 individuals have been so honored.

June 24

IBM receives the Golden Ladder Award from *We* magazine for being the “No.1 Employer in America for People with Disabilities.”

August 14

A survey by the National Society of Black Engineers finds IBM the employer most preferred.

August 18

IBM introduces the AS/400e — a new series of AS/400 servers optimized to help customers take advantage of business opportunities on the Internet. The AS/400e can run Java and Microsoft Windows NT applications, provide Internet security, and support thousands of Lotus Domino users while running other applications.

September 4

IBM introduces ViaVoice continuous speech recognition technology for Mandarin Chinese. In developing the product, researchers identified and classified thousands of vocal tones and homonyms, created an algorithm that deconstructs syllables into parts, and developed a new language model to transform spoken words into the right combination drawn from 6,700 Chinese characters.

July 22

IBM announces a \$25 million investment to establish a research center — its eighth in the world — in Delhi, India. The center will focus initially on weather forecasting, e-business and distance learning, and will foster joint research projects with India's leading universities.



june9

IBM completes one of the most important product transitions in the company's history with the debut of a new generation of System/390 servers, all powered by advanced microprocessors. The microprocessor “engines” help make the S/390 Parallel Enterprise Server - Generation 4 more powerful and less costly to produce and maintain than previous models, which used bipolar processor technology.

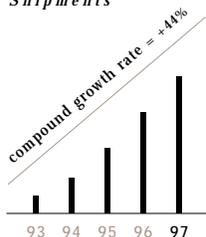
july4

NASA's *Pathfinder*, equipped with IBM RS/6000 technology for its onboard flight computer, lands on Mars. The flight computer is responsible for more than 100 pyro (explosive) events, including deploying the parachutes, inflating the airbags, and firing the retro rockets that allow *Pathfinder* to land safely on Mars.

july25

IBM, Telstra and Lend Lease Corporation form an information technology and communications alliance, signing Australia's largest information technology outsourcing deal and establishing a new network services company called Advantra. As part of the agreement, IBM Global Services Australia will take responsibility for Telstra's data center operations, creating the largest data processing center in the Southern Hemisphere.

Annual Worldwide S/390 Capacity Shipments



September 10

The U.S. Environmental Protection Agency recognizes IBM for outstanding contributions in protecting the earth's ozone layer. Since 1993, IBM has completely eliminated the annual use of more than 12 million pounds of CFCs and 3 million pounds of methyl chloroform from its products and processes.

September 15

IBM's Tivoli Systems subsidiary announces plans to acquire Unison Software, Inc., a leading developer of workload management software for distributed computing environments.

September 22

IBM scientists announce a breakthrough semiconductor manufacturing process that uses copper instead of aluminum to link transistors in chips, the culmination of 30 years of experimentation and inquiry. With copper, which conducts electricity 40 percent more efficiently than aluminum, semiconductor devices like microprocessors and memory chips can be more powerful, smaller and more energy efficient.

September 26

IBM begins shipments of DB2 Universal Database, the industry's first fully scalable, Web-ready database management system. Called universal because it can store and query alphanumeric data — as well as text documents, images, audio, video and other complex objects — it can perform a wide range of tasks from decision support to business transactions. It can also run the same software across desktops, workgroups and enterprises.

September 30

IBM's Edmark educational software subsidiary ships Let's Go Read! An Island Adventure, the first in a new series to help children build reading skills.

September 30

Lotus Domino becomes available for System/390 mainframe servers, providing the industry's leading groupware solution on the industry's most powerful and secure server.

October 7

IBM launches worldwide e-business marketing campaign — covering television, print and direct marketing. "e-business" describes for customers IBM's view of the value and benefits of a networked world.

October 13

IBM's Tokyo Research Laboratory unveils software that reads aloud information displayed on the computer screen. The software allows the visually impaired to access and use the Internet.

October 13

IBM expands its Business Computing Utility service offering to Prague. First established in Budapest, this unique e-business service gives small- and medium-sized businesses access to business management applications running on IBM servers at IBM data centers, 24 hours a day, seven days a week.



sep15

IBM unveils the ScrollPoint mouse — the latest ease-of-use innovation for PC users. It supports one-touch, 360-degree scrolling for easy Internet surfing and document navigation.

sep18

IBM dedicates its new, state-of-the-art corporate headquarters in Armonk, New York. Although smaller than the previous headquarters, the new 280,000 square-foot facility has an open office design and many more meeting areas for team and customer interaction. The building is equipped with a high-speed wire and wireless communication network, and a technology gallery that features IBM products and innovations throughout the company's history.

sep22

IBM introduces Netfinity, a new line of Intel-processor-based servers supporting the Microsoft Windows NT computing environment. Netfinity servers range from entry-level models to high-capacity symmetric multiprocessing machines, and all come with integrated IBM service and support.

IBM's stock price closes at \$104.63 on the last business day of 1997.

October 23

IBM provides \$10 million in new Reinventing Education grants to 12 U.S. school districts and state education departments, bringing the total to \$35 million since the program was established in 1994. Each grant recipient will work closely with IBM to provide better instructional tools in math, science and reading, increase parental involvement and improve the flow of information among home, school and teachers with the help of technology.

November 17

IBM announces plans to invest \$700 million to build one of the world's most advanced microchip development facilities at IBM's site in East Fishkill, New York. The facility will be among the first to produce chips on 12-inch silicon wafers, and will use IBM's unique copper manufacturing process and advanced X-ray lithography technology.

November 24

IBM ships Network Station Series 1000, the industry's first network computer to run Java applications, including Lotus' eSuite.

December 19

IBM's Tivoli Systems subsidiary announces plans to acquire Software Artistry, Inc., a leading provider of consolidated service desk and customer relationship management software.

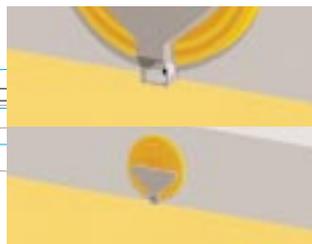
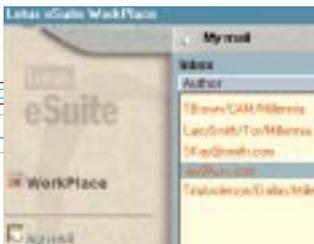
December 22

Daiwa Bank and IBM Japan agree to establish a joint venture that will offer information technology services to financial institutions. It will be the largest such outsourcing deal in Japan, and one of the largest in the worldwide financial industry.

December 30

IBM Research sets a new world record for disk drive storage density — 10 gigabits per square inch, equivalent to 1,450 average-length novels.

98startshere



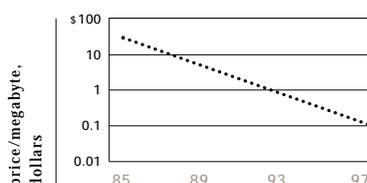
nov3

With the introduction of eSuite, Lotus becomes the first company to offer a complete set of business productivity software written in Java for the network computing environment. Included in eSuite are e-mail, calendar, address book, word processing, spreadsheet, presentation graphics and project scheduling applications. Unlike traditional productivity software, the bulk of eSuite's software code resides and executes on servers in a network, instead of on an individual PC.

nov10

IBM announces the world's highest-capacity desktop PC disk drive. The 16.8-gigabyte drive incorporates breakthrough technology called giant magnetoresistive (GMR) heads. No bigger than the head of a pin, the GMR head is the world's most sensitive sensor for reading and writing computer data on magnetic disks.

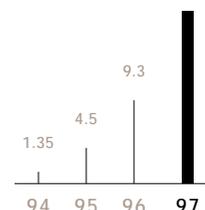
Magnetic Hard-Disk Drive Industry Price per Megabyte Evolution



dec31

IBM ships 4 million Notes seats in the fourth quarter of 1997 — the largest quarter ever of unit volumes for Notes. Total installed base reaches 20 million, up from 2.2 million when Lotus joined IBM in 1995.

Worldwide Lotus Notes Seats (in millions)



At IBM, we strive to lead in the creation, development and manufacture of the industry's most advanced information technologies, including computer systems, software, networking systems, storage devices and microelectronics.

We translate these advanced technologies into value for our customers through our professional solutions and services businesses worldwide.

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